

CLAIMS

What is claimed is:

1. A surgical drain comprising:
  2. (a) a longitudinal axis;
  3. (b) an interior lumen;
  4. (c) an outer surface;
  5. (c) an opening for connection to an outflow tube;
  6. (e) a first plurality of openings formed in the outer surface and extending along the longitudinal axis, at least some of the first plurality of openings in fluid communication with the interior lumen; and
  9. (f) a second plurality of openings, each of the second plurality of openings having a different shape and size than the openings of the first plurality of openings.
10. 2. A surgical drain having an elongated, flexible body, two ends, a length and a longitudinal axis, and comprising:
  3. (a) an outer surface;
  4. (b) an interior lumen;
  5. (c) an opening to connect the drain to an outflow tube;
  6. (d) a first plurality of openings formed in the outer surface and in fluid communication with the interior lumen, the first plurality of openings comprising alternating large cross-sectional openings and small cross-sectional openings.
1. 3. The drain of claim 2 wherein the large cross-sectional openings are circular and the small cross-sectional openings are rectangular.
1. 4. The drain of claim 2 wherein the first plurality of openings is formed in the outer surface along the longitudinal axis.

1        5.     The drain of claim 2 that further includes a second plurality of openings  
2     comprising alternating large cross-section openings and small cross-sectional openings.

1        6.     The drain of claim 5 wherein the second plurality of openings is formed in  
2     the outer surface along the longitudinal axis.

1        7.     The drain of claim 5 wherein the first plurality of openings is formed in  
2     the outer surface along the longitudinal axis.

1        8.     The drain of claim 5 wherein the large cross-sectional openings of the  
2     second plurality of openings are offset from the large cross-sectional openings of the first  
3     plurality of openings.

1        9.     The drain of claim 5 wherein the small cross-sectional openings of the  
2     second plurality of openings are offset from the small cross-sectional openings of the first  
3     plurality of openings.

1        10.   The drain of claim 2 wherein the interior lumen extends the length of the  
2     drain.

1        11.   The drain of claim 2 wherein the opening is at an end of the drain.

1        12.   The inflow section of claim 11 wherein the end opposite the opening is  
2     plugged to prevent bodily material from entering.

1        13.   A surgical drain system comprising the drain of claim 2.

1        14.   The surgical drain system of claim 13 further comprising a reservoir and  
2     an outflow to be extending from the drain to the reservoir

3        15.   A surgical drain comprising:

4                (a)     an outer surface, an internal lumen, a generally flat bottom surface  
5     and a generally flat top surface;

6 (b) two side surfaces connecting the top surface and the bottom

7 surface;

8 (c) circular openings in the top surface; and

9 (d) non-circular openings in one of the side surfaces.

10 16. The drain of claim 15 wherein the non-circular openings are rectangular.

11 17. The drain of claim 15 wherein the circular openings have a diameter of 4

12 mm.

13 18. The drain of claim 15 that further includes circular openings on the bottom

14 surface.

15 19. The drain of claim 15 that includes non-circular openings on both side

16 surfaces.

17 20. The drain of claim 15 that includes at least one rib in the internal lumen to

18 separate the top surface and the bottom surface.

19 21. The drain of claim 20 that includes two ribs to separate the top surface and

20 the bottom surface.

21 22. The drain of claim 2 wherein the lumen has diameter of 6 mm..

22 23. A surgical drain having an outer surface, an interior lumen, and a channel

23 formed in the outer surface, the channel for impeding the in-growth of bodily tissue

24 therein, and one or more openings formed at least partially in the base of channel, the

25 openings in fluid communication with the interior lumen.

26 24. The drain of claim 23 wherein there are four channels.

27 25. The drain of claim 23 wherein the channel is about 0.5 mm deep.

28 26. The drain of claim 23 wherein the drain has a circular cross-section.

29        27. The drain of claim 23 wherein the openings are rectangular.

30        28. The drain of claim 27 that further comprises circular openings.

31        29. The drain of claim 28 wherein the circular openings are formed along the

32        channel.

33        30. The drain of claim 29 wherein the circular openings alternate with the

34        rectangular openings.

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